

IN THE CLAIMS:

Please amend claims 1 – 3, and add claim 4 as shown in the following listing of the entire claims in the application.

1. (Currently Amended) A method for ~~manufacturing~~ attaching an array of single-stranded hybridizeable nucleic acid probes ~~a nucleic acid array~~ for use in detecting nucleic acids by hybridization comprising the steps of:
providing a substrate having a surface in which on which maleimide functional groups are formed ~~on a surface~~;
covalently immobilizing single stranded nucleic acid said probes unto said surface using said functional groups to form a first region comprising the covalently immobilized probes and a second region wherein the probes are not covalently immobilized for hybridizing to the nucleic acids on a first region of the surface covalently ;
after said immobilizing single stranded nucleic acid probes, hydrolyzing unreacted maleimide functional groups formed on the second region where said single stranded nucleic acid probes are not immobilized to form new functional groups which are negatively charged in an aqueous environment.
2. (Currently Amended) A method for ~~manufacturing~~ attaching an array of single-stranded hybridizeable nucleic acid probes according to claim 1, wherein said single-stranded nucleic acid probes are bonded via thioether linkage to said maleimide functional groups.
3. (Currently Amended) A method for ~~manufacturing~~ attaching an array of single-stranded hybridizeable nucleic acid probes according to claim 1, wherein said maleimide functional groups is hydrolyzed in an alkaline solution.
4. (New) A method of detecting nucleic acids by hybridization using the covalently immobilized hybridizeable probes according to claim 1.